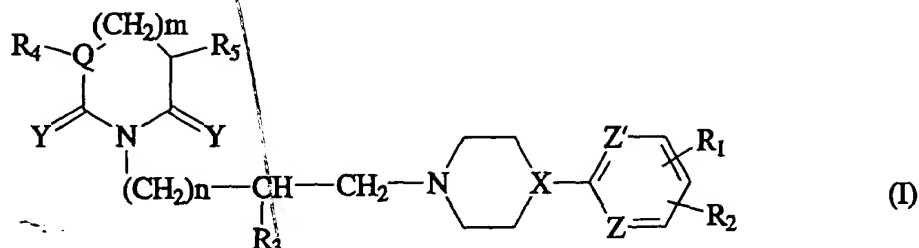


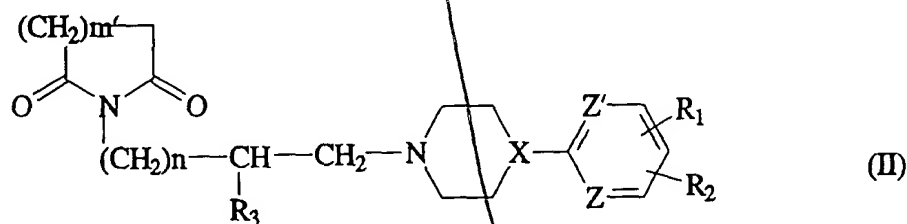
CLAIMS

1. A compound having the structure of Formula I



its pharmaceutically acceptable salts, esters, enantiomers, diastereomers, N-oxides, amides, prodrugs, or metabolites, wherein Y is O or S; Q, X, Z, and Z' are independently CH or N; $m=0-3$; $n=0-4$; R_1, R_2 are independently selected from: H, F, Cl, Br, OCH_3 , OC_2H_5 , OCH_2CF_3 , SCF_3 , CH_3 , C_2H_5 , CF_3 , isopropoxy, and cyclopropyl; R_3 is H, R_6 , OH or OR_6 ; R_6 is a substituted or unsubstituted alkyl chain containing 1-6 carbon atoms; and R_4, R_5 are H, C_{1-3} alkyl, substituted or unsubstituted phenyl, or a 5-membered spiro ring, except that R_1 is H, R_2 is H, Cl or CF_3 , R_3, R_4 and $R_5 = H$, $Y = O$ and $Q = CH$ when $m=0$ and $n=1$; and also except that R_1 is H, R_2 is OCH_3 , R_3, R_4 and $R_5 = H$, $Y=O$, $Q=CH$ when $m=0$ and $n=2$.

2. The compound of claim 1 having the structure of Formula II



wherein n, X, Z, Z', R₁, R₂ and R₃ are as defined for Formula I and $\overline{m}^2 = 1-4$, except that R₁ is H, R₂ is H, Cl or CF₃ and R₃ is H when $\overline{m}^2 = 1$ and n = 1; and also except that R₁ is H, R₂ is OCH₃ and R₃ is H when $\overline{m}^2 = 1$ and n = 2.

- 5 3. The compound of claim 1 which is 1-[4-(4-fluorophenyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt.
4. The compound of claim 1 which is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt.
5. The compound of claim 1 which is 1-[4-(2-pyridyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt.
6. The compound of claim 1 which is 1-[4-(^(2-pyridyl)pyrimidyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt. A
7. The compound of claim 1 which is 1-[4-(3,4-dimethylphenyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt.
- 15 8. The compound of claim 1 which is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-2-(2,5-dioxopyrrolidin-1-yl)ethane or its hydrochloride salt.
9. The compound of claim 1 which is 1-[4-(3-methoxyphenyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt.
10. The compound of claim 1 which is 1-[4-(4-methoxyphenyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt.
- 20 11. The compound of claim 1 which is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.

12. The compound of claim 1 which is 1-[4-(4-fluorophenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
13. The compound of claim 1 which is 1-[4-(4-chlorophenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
- 5 14. The compound of claim 1 which is 1-[4-(3-trifluoromethylphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
15. The compound of claim 1 which is 1-[4-(2-fluorophenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
16. The compound of claim 1 which is 1-[4-(2-methylphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
17. The compound of claim 1 which is 1-[4-(2-pyridyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
18. The compound of claim 1 which is 1-[4-(3-chlorophenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
- 15 19. The compound of claim 1 which is 1-[4-(3,4-dimethylphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
20. The compound of claim 1 which is 1-[4-(2-pyrimidyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
21. The compound of claim 1 which is 1-[4-(3-methoxyphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.
- 20 22. The compound of claim 1 which is 1-[4-(4-methoxyphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.

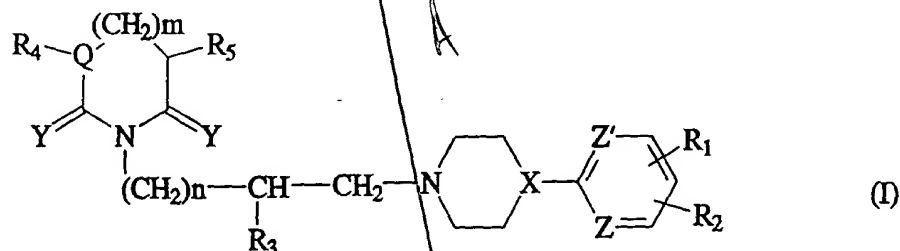
23. The compound of claim 1 which is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-4-(2,6-dioxopiperidin-1-yl)butane or its hydrochloride salt.

24. The compound of claim 1 which is 1-[4-(2-Methoxyphenyl)piperazin-1-yl]-3-[2,5-dioxo-3-phenyl-pyrrolidin-1-yl]propane or its hydrochloride salt.

5 25. The compound of claim 1 which is 1-[4-(Phenyl)piperidin-1-yl]-3-[2,5-dioxopyrrolidin-1-yl]propane or its hydrochloride salt.

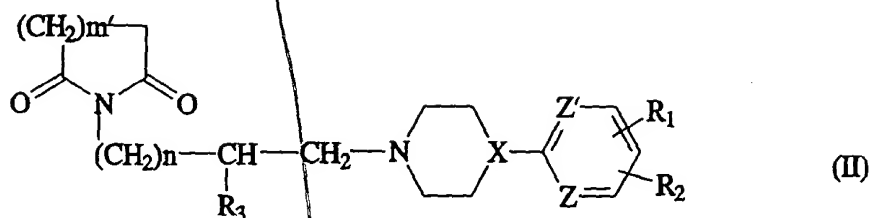
26. A pharmaceutical composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier.

27. A method of selectively antagonizing α_1 -adrenergic receptors in a mammal comprising administering to said mammal a compound having the structure of Formula I



15 its pharmaceutically acceptable salts, esters, amides, enantiomers, diastereomers, N-oxides, amides, prodrugs, or metabolites, wherein Y is O or S; Q, X, Z, and Z' are independently CH or N; m=0-3; n= 0-4; R₁, R₂ are independently selected from: H, F, Cl, Br, OCH₃, OC₂H₅, OCH₂CF₃, SCF₃, CH₃, C₂H₅, CF₃, isopropoxy, and cyclopropyl; R₃ is H, R₆, OH or OR₆; R₆ is
20 a substituted or unsubstituted alkyl chain containing 1-6 carbon atoms; and R₄, R₅ are H, C₁₋₃ alkyl, substituted or unsubstituted phenyl, or a 5-membered spiro ring.

28. The method of claim 27 wherein said compound has the structure of Formula II



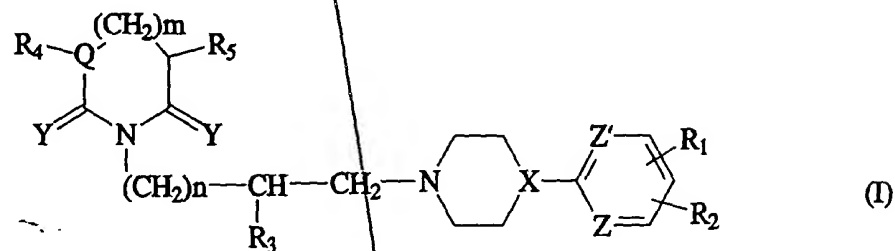
wherein n, X, Z, Z', R₁, R₂ and R₃ are as defined for Formula I and m' = 1-4.

29. The method of claim 28 wherein said compound is 1-[4-(2-methoxy-phenyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl) propane or its hydrochloride salt.

30. The method of claim 28 wherein said compound is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-4-(2,5-dioxopyrrolidin-1-yl)butane or its hydrochloride salt.

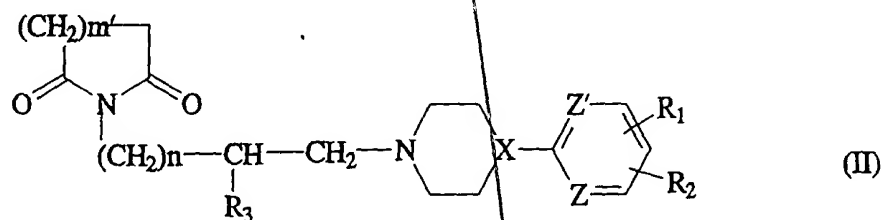
31. The method of claim 28 wherein said compound is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.

32. A method for treating benign prostatic hypertrophy in a mammal comprising administering to said mammal a compound of the structure of Formula I



its pharmaceutically acceptable salts, esters, amides, enantiomers, diastereomers, N-oxides, amides, prodrugs, or metabolites, wherein Y is O or S; Q, X, Z, and Z' are independently CH or N; m=0-3; n= 0-4; R₁, R₂ are independently selected from: H, F, Cl, Br, OCH₃, OC₂H₅, OCH₂CF₃, SCF₃, CH₃, C₂H₅, CF₃, isopropoxy, and cyclopropyl; R₃ is H, R₆, OH or OR₆; R₆ is a substituted or unsubstituted alkyl chain containing 1-6 carbon atoms; and R₄, R₅ are H, C₁₋₃ alkyl, substituted or unsubstituted phenyl, or a 5-membered spiro ring.

33. The method of claim 32 wherein said compound has the structure of Formula II



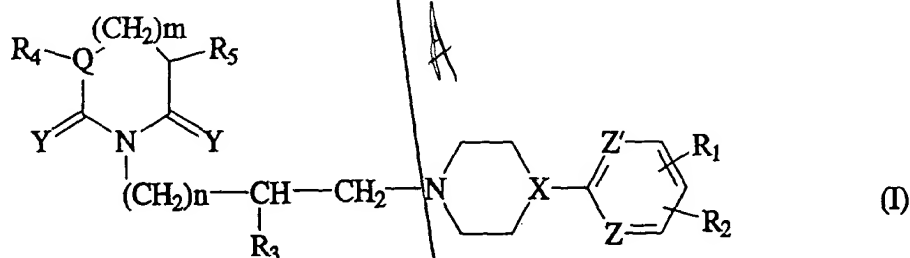
wherein n, X, Z, Z', R₁, R₂ and R₃ are as defined for Formula I and m' = 1-4.

34. The method of claim 33 wherein said compound is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt.

35. The method of claim 33 wherein said compound is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-4-(2,5-dioxopyrrolidin-1-yl)butane or its hydrochloride salt.

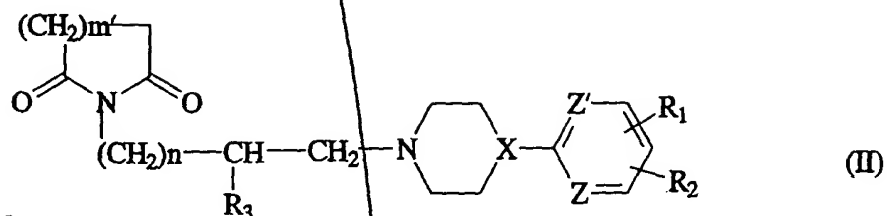
36. The method of claim 33 wherein said compound is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.

37. A method for treating vascular disease, congestive heart failure, or hypertension in a mammal comprising administering to said mammal a compound of the structure of Formula I



its pharmaceutically acceptable salts, esters, amides, enantiomers, diastereomers, N-oxides, amides, prodrugs, or metabolites, wherein Y is O or S ; Q , X , Z , and Z' are independently CH or N ; $m=0-3$; $n=0-4$; R_1 , R_2 are independently selected from: H , F , Cl , Br , OCH_3 , OC_2H_5 , OCH_2CF_3 , SCF_3 , CH_3 , C_2H_5 , CF_3 , isopropoxy, and cyclopropyl; R_3 is H , R_6 , OH or OR_6 ; R_6 is a substituted or unsubstituted alkyl chain containing 1-6 carbon atoms; and R_4 , R_5 are H , C_{1-3} alkyl, substituted or unsubstituted phenyl, or a 5-membered spiro ring.

38. The method of claim 37 wherein said compound has the structure of Formula II



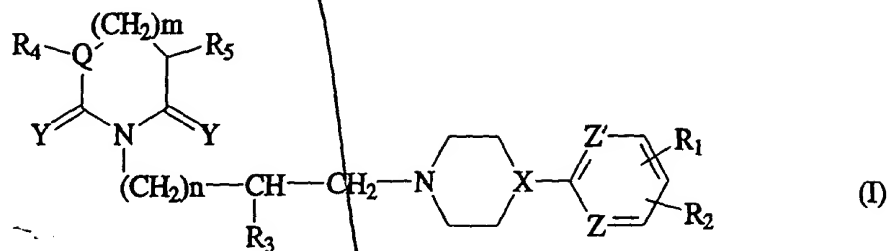
wherein n, X, Z, Z', R₁, R₂ and R₃ are as defined for Formula I and m' = 1-4.

39. The method of claim 38 wherein said compound is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-3-(2,5-dioxopyrrolidin-1-yl)propane or its hydrochloride salt.

40. The method of claim 33 wherein said compound is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-4-(2,5-dioxopyrrolidin-1-yl)butane or its hydrochloride salt.

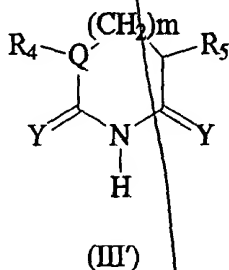
41. The method of claim 33 wherein said compound is 1-[4-(2-methoxyphenyl)piperazin-1-yl]-3-(2,6-dioxopiperidin-1-yl)propane or its hydrochloride salt.

42. A method for making a compound having the structure of Formula I

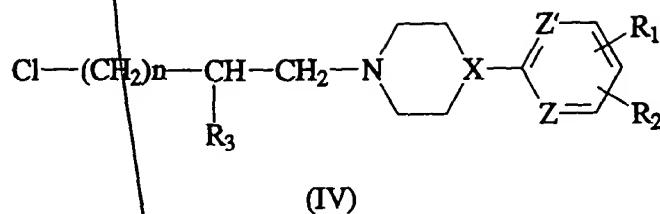


its pharmaceutically acceptable salts, esters, amides, enantiomers, diastereomers, N-oxides, amides, prodrugs, or metabolites, wherein Y is O or S; Q, X, Z and Z' are independently CH or N; m=0-3; n= 0-4; R₁, R₂ are independently selected from: H, F, Cl, Br, OCH₃, OC₂H₅, OCH₂CF₃, SCF₃, CH₃, C₂H₅, CF₃, isopropoxy, and cyclopropyl; R₃ is H, R₆, OH or OR₆; R₆ is a substituted or unsubstituted alkyl chain containing 1-6 carbon atoms; and R₄, R₅ are H, C₁₋₃ alkyl, substituted or unsubstituted phenyl, or a 5-membered spiro ring,

which comprises reacting a compound having the structure of Formula III'

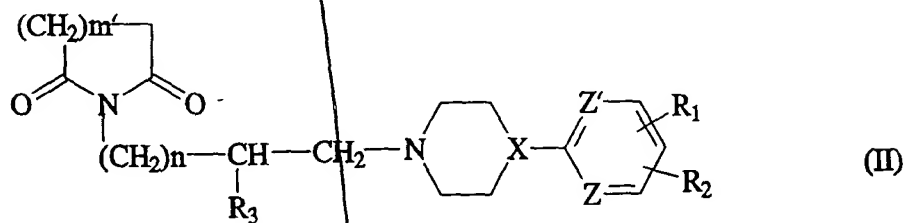


with a compound having the structure of Formula IV



thereby to produce the compound of Formula I.

43. The method of claim 42 for producing a compound having the structure of Formula II



wherein n, X, Z, Z', R₁, R₂ and R₃ are as defined for Formula I and m' = 1-4,

5

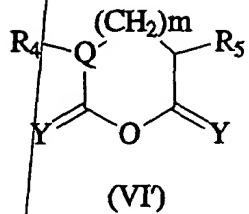


44. A method for making a compound having the structure of Formula I

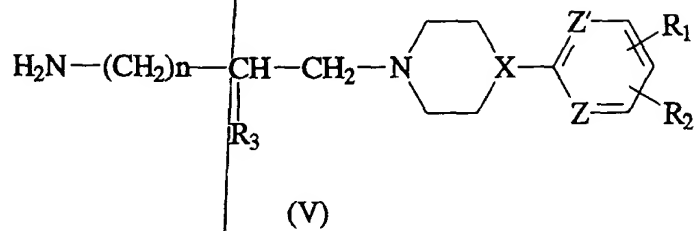


20

which comprises reacting a compound having the structure of Formula VI'

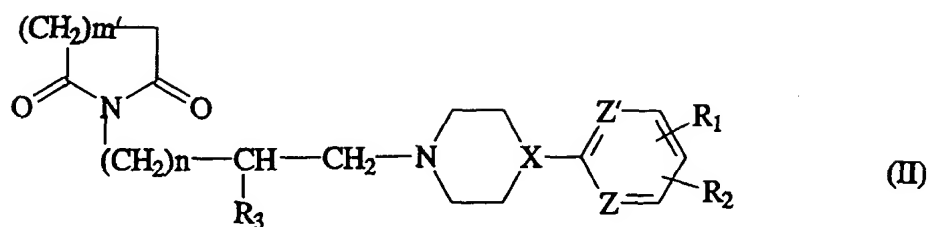


with a compound having the structure of Formula V



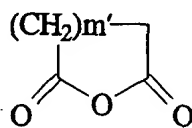
thereby to produce the compound of Formula I.

45. The method of claim 44 for producing a compound having the structure of Formula II



wherein n, X, Z, Z', R₁, R₂ and R₃ are as defined for Formula I and m' = 1-4,

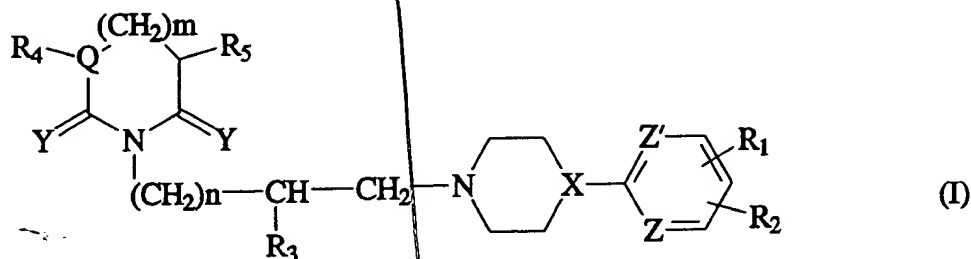
which comprises reacting a compound having the structure of Formula VI



(VI)

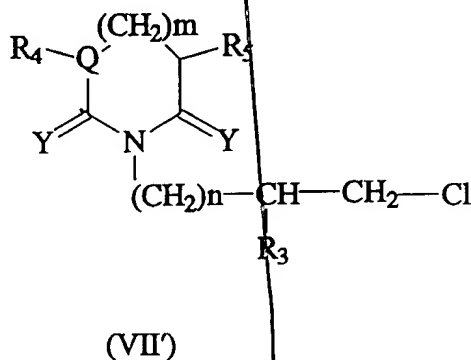
with said compound of Formula V.

46. A method for making a compound having the structure of Formula I

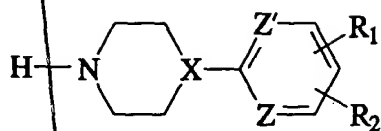


its pharmaceutically acceptable salts, esters, amides, enantiomers, diastereomers, N-oxides, amides, prodrugs, or metabolites, wherein Y is O or S; Q, X, Z and Z' are independently CH or N; m=0-3; n= 0-4; R₁, R₂ are independently selected from: H, F, Cl, Br, OCH₃, OC₂H₅, OCH₂CF₃, SCF₃, CH₃, C₂H₅, CF₃, isopropoxy, and cyclopropyl; R₃ is H, R₆, OH or OR₆; R₆ is a substituted or unsubstituted alkyl chain containing 1-6 carbon atoms; and R₄, R₅ are H, C₁₋₃ alkyl, substituted or unsubstituted phenyl, or a 5-membered spiro ring,

15 which comprises reacting a compound having the structure of Formula VII'



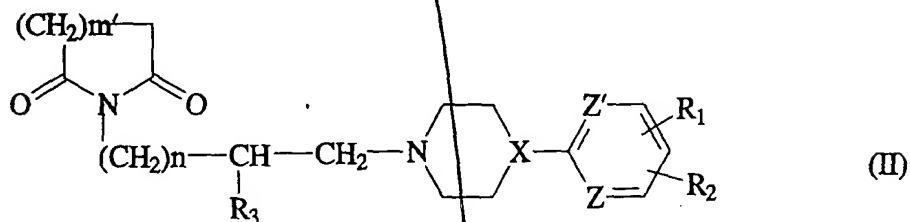
with a compound having the structure of Formula VIII



(VIII)

thereby to produce the compound of Formula I.

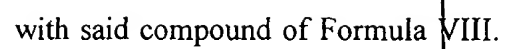
47. The method of claim 46 for producing a compound having the structure of Formula II



(II)

wherein n, X, Z, Z', R₁, R₂ and R₃ are as defined for Formula I and m' = 1-4,
which comprises reacting a compound having the structure of Formula VII.

10



add